

SCHOLARS' NEEDS AND EXPECTATIONS ON APPLICATION AND DEVELOPMENT OF ANNOTATION IN DIGITAL HUMANITIES

Ksenia Zaytseva, Graduate of Digital Libraries Learning Master's Program (DILL),
ksenia1zaytseva@gmail.com

Sonia Theodoridou, Graduate of Digital Libraries Learning Master's Program (DILL),
soniatheodoridou@gmail.com

***Abstract:** Annotating is one of the most primitive scholarly activities. However with the latest development of web technologies and especially Semantic web technologies there are new evolving forms of annotation and possible new benefits which annotation can contribute. Current study aims to explore how digital humanities use annotation in digital world, how the way of annotation application in digital context reflects scholars habits to annotate printed documents, what issues scholars encounter in using digital annotation, what anticipations and preferences scholars have regarding the future development of annotation tools.*

Keywords: annotation, digital humanities, digital tools, semantic annotation

SCHOLARS' NEEDS AND EXPECTATIONS ON APPLICATION AND DEVELOPMENT OF ANNOTATION IN DIGITAL HUMANITIES

By Ksenia Zaytseva, Sonia Theodoridou
Digital Libraries Learning (DILL)

Introduction

With the development of digital humanities field the question of infrastructure is becoming increasingly important. Establishment and development of digital tools should be held in close relation to digital humanities perspective.

The development of Semantic web technologies opens up new perspectives in annotation development. Annotation is considered as means for creating user-generated metadata. This in turn facilitates enrichment of the Semantic web with structured knowledge. The employment of annotation in this sense plays a significant role in contribution to the Web of Data and progress in searching, retrieval and navigation capabilities of information systems. On the whole this process influences development of digital humanities infrastructure which needs to be "comfortable" and sustainable platform for carrying out and succeeding in research. Therefore appropriate decisions and developments have to be implemented taking into account digital humanities vision, perception and style of research.

Current study aims to explore how digital humanities use annotation in digital world, how the way of annotation application in digital context reflects scholars habits to annotate printed documents, what issues scholars encounter in using digital annotation, what anticipations and preferences scholars have regarding future development of annotation tools. The study is intended to enlighten users needs in order to contribute annotation development and provide developers with new ideas for improvement of existing systems.

Digital Humanities

is an area of research, teaching and creation concerned with the intersection of computing and the disciplines of the humanities (Wikipedia).

Annotation

is a note by way of explanation or comment added to a text or diagram (Oxford Dictionary).

Semantic annotation

- is metadata based on semantically rich ontologies and modelled as properties of RDF schema (Koivunen, 2001);

- is relational metadata created by users in order to establish connection between the objects and present relations within data cloud, presented in formal language that makes it understandable and processable by computing devices (Cimiano, Handschuh, Staab, 2004).

Methods

Qualitative research
Survey
Web-based questionnaire



LinkedIn



27 responses
for the period
from April 22,
2013 to
May 16, 2013

Findings

How scholars annotate

Adding notes
Highlighting
Commenting
Bookmarking
Tagging

Systems used



Collaboration

81% positive responses on annotation usage in scientific collaboration
Main tools:
eMail & GoogleDocs

Semantic annotation

63% of respondents declared that have never used semantic annotation in their work. The reasons behind: unawareness about such systems existence; absence of an appropriate annotation system, net of users or time to learn how to use it.

Needs & Expectations

Easy-to-use; Interoperability with Word processors, PDF readers and cloud based services;
Data integration into one space; System capable to let users organize, track, archive, search and retrieve annotations; Semantic layer behind an annotation.

Conclusion

Collected data showed that besides annotating in Word processors and PDF editors, scholars use web-based information management systems such as Zotero, Evernote, Diigo and others. Basic annotating practices such as adding notes, comments and highlights still stay the most valuable in professional work.

Most digital humanities scholars are not aware of semantic annotation and its features, but demonstrate an interest and need for more sophisticated and at the same time user-friendly system that could help them integrate information resources and annotate objects smoothly from different locations, creating one information environment. Users' expectations concern improvements of annotation systems usability, interoperability with various file types and cloud services, customizability and functionality.

References:

- Agosti, M., Ferro, N. (2007). A formal model of annotations of digital content. *ACM Transactions on Information Systems*, Vol. 26, No. 1.
- Cimiano, P., Handschuh, S., & Staab, S. (2004). Towards the self-annotating web. In *Proceedings of the 13th international conference on World Wide Web* (pp. 462-471).
- Grassi, M., Morbidoni, C., Nucci, M., Fonda, S., & Ledda, G. (2012). Pundit: Semantically Structured Annotations for Web Contents and Digital Libraries. In *SDA* (pp. 49-60).
- Koivunen, M. (2001). Annotea: Applying Semantic Web Technologies to Annotations. In the proceedings of the Semantic Web Kick-off Seminar in Finland.
- Unsworth, J. (2000, May). Scholarly Primitives: what methods do humanities researchers have in common, and how might our tools reflect this.

Contact: ksenialzaytseva@gmail.com